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A partir du 1/02/17, SAMES Technologies SAS devient SAMES KREMLIN SAS



# User manual

## High Voltage Unit UHT 158 EEx e

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A catalogue is available on request. Choose from a wide range of courses to acquire the skills or knowledge that is required to match your production requirements and objectives.

Our training courses can be delivered at your site or in the training centre at our Meylan head office.

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## High Voltage Unit

### UHT 158 EEx e

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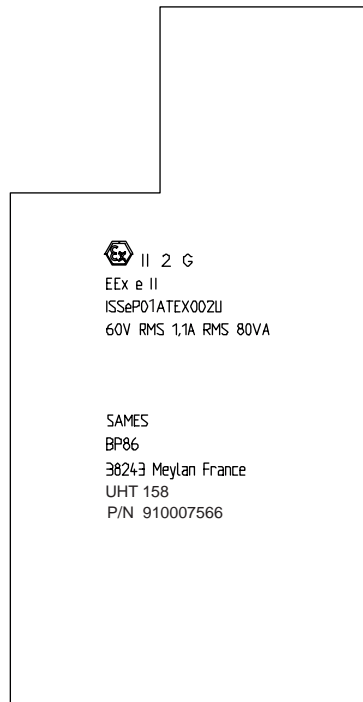
## 1. Warnings



**WARNING** : This equipment may become a safety hazard if it is not operated, disassembled and reassembled in accordance with the instructions given in this manual.

See the equipment manual.

### 1.1. The high voltage unit UHT 158 marking



## 2. Introduction

The high voltage units UHT 158 EEx e permit to feed a paint applicator with high voltage without high voltage cable. These units are mainly used for the Nanobell atomizers.

## 3. Description

The UHT 158 EEx e comprises :

- A moulded part with :
  - High voltage elements (transformer, cascade, measuring resistance and priming resistance),
  - Low voltage elements (recognition chip and protection elements)
  - High voltage outlet adapted.

## 4. Characteristics

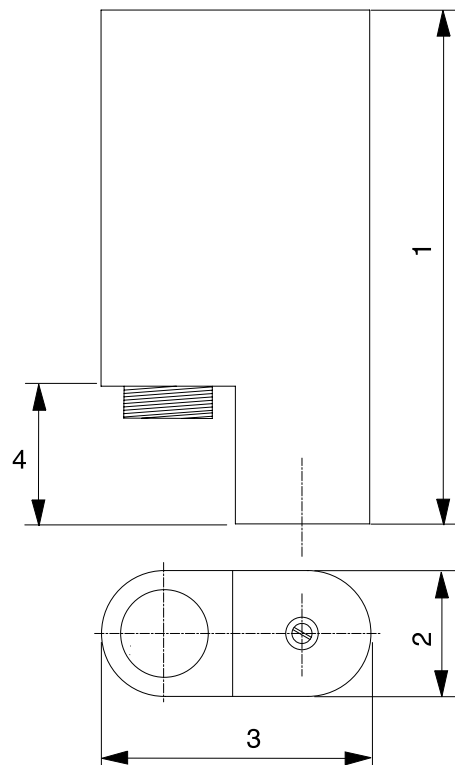
### 4.1. Electrical characteristics

Max input voltage	$\leq 60$ V RMS – 25 kHz roughly
Outlet voltage	70 kV, negative polarity.
Outlet current	100 $\mu$ A, (*)
Outlet power	7 W max

### 4.2. Mechanical characteristics

1	125,5 mm
2	40 mm
3	80 mm
4	41 mm

Weight : 0,440 Kg



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## 5. Safety precautions

- Clean and grease with dielectric grease before fitting.
- Never assemble or disassemble with voltage on.
- Do not put the low voltage cable into contact with solvent.
- Cable length between high voltage unit and generator GNM 200 (unit cable + any extension) is 30 m.

## 6. Maintenance

### 6.1. Electrical connexions

Cable diameter: = CEE 0,5 mm<sup>2</sup> or 0,34 mm<sup>2</sup>

Cable diameter: US = Gauge AWG 20 or AWG 22

				Description signal
1		Ground		
2	A	Yellow	0,34 mm <sup>2</sup>	HV Signal
3	B	Green	0,34 mm <sup>2</sup>	HV I Signal
4	C	White	0,5 mm <sup>2</sup>	Transformer input
5	D	Brawn	0,5 mm <sup>2</sup>	Transformer output
6	E	Pink	0,34 mm <sup>2</sup>	L Signal
7	F	Grey	0,34 mm <sup>2</sup>	H Signal
	G	Ground		

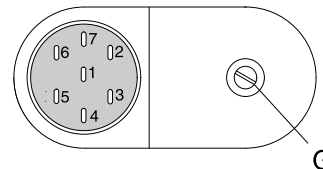
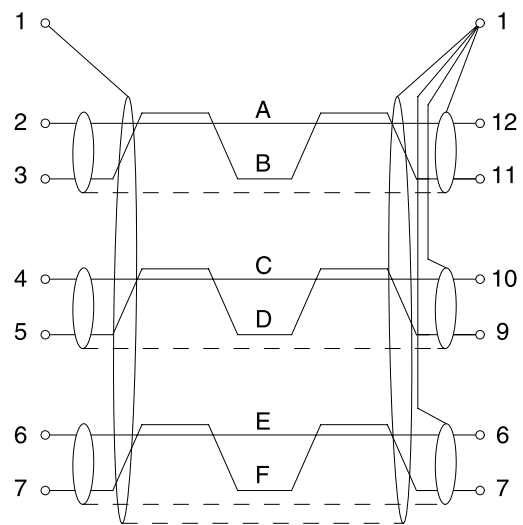
The cable used for the connections must respect:

- wire diameter comprised between 0,3 mm<sup>2</sup> and 0,8 mm<sup>2</sup>
- diameter: 4 mm mini and 8 mm maxi.
- a complete shielding and a second shielding for each pair of wire

**Nota :** Should some wires are not used, they should be connected to the ground

### UHT 158

GNM 200

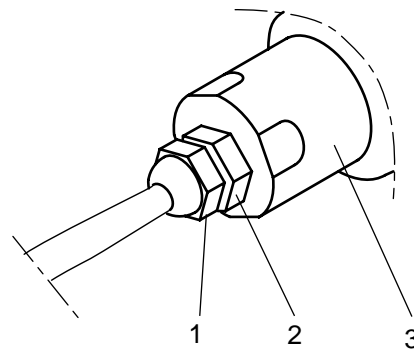


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## 6.2. Cable replacement

1	Stuffing box nut
2	Stuffing box body
3	Stuffing box union

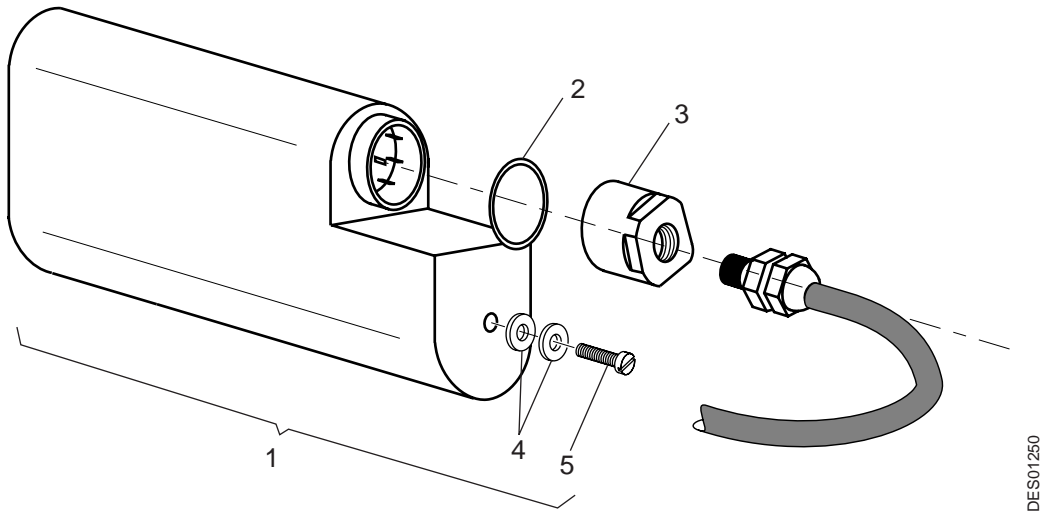
- 1 Maintaining the body, loosen the nut in order to unblock the cable
- 2 Unscrew the union in order to access to the connections
- 3 Unplug each electrical wire
- 4 Unscrew the body and keep the union
- 5 Replace the cable
- 6 Replace the seal washer if needed



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## 7. Spare parts

### 7.1. "UHT 158 EEx e" High Voltage Unit



Item	Part number	Description	Qty	Sale unit	Maintenance Level for Spare part (*)
1	910007566	UHT158 EEx e, 70kV with program	1	1	3
2	1408523	Seal washer	1	1	2
3	1310068	Stuffing box union	1	1	2
4	X7DDZU005	Brass washer	2	1	3
5	X7CVCB180	Brass screw M5x8	1	1	3

(\*)

Level 1: Standard maintenance

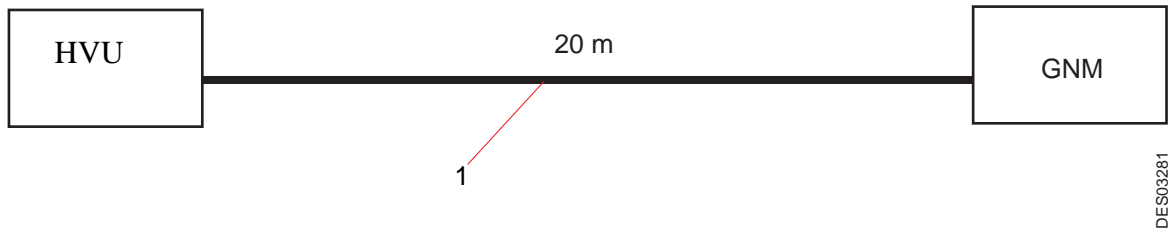
Level 2: Corrective maintenance

Level 3: Exceptional maintenance

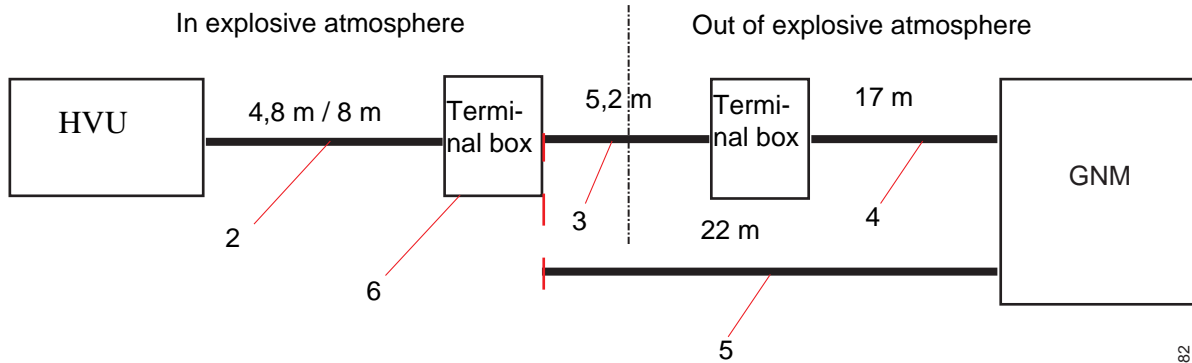


## 7.2. Cables

**Note:** Each cable has a defined length; for other lengths, please, contact SAMES Technologies.



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Item	Part number	Description	Qty	Sale unit
1	1514591	Equipped low voltage cable, Length: 20 m	1	1
2	1527252	Low voltage cable, Length: 4,8 m (HVU to terminal box)	1	1
	910001236	Low voltage cable, Length: 8 m (HVU to terminal box)	option	1
3	910000086	Connection cable, Length: 5,2 m	1	1
4	910000070	Low voltage cable, Length: 17 m (Connection terminal box to GNM)	1	1
5	1520516	Low voltage cable, Lg: 22 m (Connection terminal box to GNM)	1	1
6	1303899AT	Terminal box	1	1



**WARNING :** Cable length between the High Voltage Unit and the Control Modul GNM (unit cable + any extension) should not exceed 30m.